

Title (en)

STRUCTURALLY MODIFIED ACELLULAR TISSUE ENGINEERING SCAFFOLDS AND METHODS OF PRODUCTION

Title (de)

STRUKTURELL MODIFIZIERTE AZELLULÄRE GEWEBE-ENGINEERING-GERÜSTE UND HERSTELLUNGSVERFAHREN

Title (fr)

ECHAFAUDAGES DE TISSU ACELLULAIRE A STRUCTURE MODIFIEE ET LEURS PROCEDES DE FABRICATION

Publication

EP 2031968 A4 20101215 (EN)

Application

EP 07755875 A 20070420

Priority

- US 2007009781 W 20070420
- US 79403706 P 20060421

Abstract (en)

[origin: US2007248638A1] Methods are provided for producing a bioscaffold from natural tissues by oxidizing a decellularized tissue to produce a bioscaffold having pores therein. The pore size and porosity is increased to better accommodate intact cells so that live cells can better infiltrate and inhabit the bioscaffold. The bioscaffold may be freeze-dried or lyophilized, sterilized and (optionally) aseptically packaged for subsequent use. A further aspect of the present invention is a bioscaffold produced by the processes described herein. Methods of treatment using the bioscaffold as a graft or as a biomedical implant for implantation are also provided. Also provided are methods of seeding a bioscaffold with mammalian cells, wherein the seeding carried out either in vitro or in vivo, and wherein a bioscaffold produced as described herein is utilized for said seeding.

IPC 8 full level

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Citation (search report)

- [X] US 2002119437 A1 20020829 - GROOMS JAMIE M [US], et al
- [X] US 2003014126 A1 20030116 - PATEL UMESH H [US], et al
- [A] US 6576265 B1 20030610 - SPIEVACK ALAN R [US]
- See references of WO 2007124127A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 2007248638 A1 20071025; **US 7829108 B2 20101109**; EP 2031968 A2 20090311; EP 2031968 A4 20101215; EP 2031968 B1 20171122; US 2011046732 A1 20110224; US 2012259415 A1 20121011; US 8221777 B2 20120717; US 9114196 B2 20150825; WO 2007124127 A2 20071101; WO 2007124127 A3 20081204

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